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State of Utah

DEPARTMENT OF NATURAL RESOURCES
DIVISION OF OIL, GAS AND MINING

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May 1, 1991

CERTIFIED RETURN RECEIPT
P 074 978 818

Mr. Milo Bosshardt
Redmond Clay & Salt Co.
370 South State
Redmond, Utah 84652

Dear Mr. Bosshardt:

RE: Revised Reclamation Estimate for Redmond Clay & Salt Company, M/039/002,
Sanpete County, Utah

Thank you for your last response received by the Division on January 9, 1991. We appreciate the additional information and comments you provided on the first draft of a reclamation estimate for your operation. Please accept our apology for the unforeseen delay in responding to your comments. We have since changed portions of our last estimate and have enclosed a revised version for your review. Please note the changes which are shaded in.

Your comments indicated nearly all structures or facilities would have a post mining use. The Division can accept a post mining use for a large portion of your facilities. However, you will note in this latest estimate that several of these facilities do not have an acceptable post mining use. This Division estimate allows retention of the crushers and mill after limited demolition or remodeling. Main access roads within the mine area have not been included in the reclamation estimate. These roads are considered to have an acceptable post mining use.

The reclamation costs for the crushers, mill, scales and compressor house are largely based on assumptions made by the Division. As a matter of policy, all Division reclamation cost estimates are based on third party costs and not the operator's cost to perform the work. Reclamation costs are calculated in current dollars and escalated five (5) years forward. The reclamation surety will be re-evaluated on a 5-year basis rather

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than annually, provided there are no significant changes to the mining and/or reclamation plan during this time period.

The Division has taken into consideration all information and comments provided by Redmond Clay and Salt Company to date. We have made adjustments to the reclamation estimate as determined reasonable and appropriate. The latest \$228,100 estimate is the amount of reclamation surety that will need to be provided to this agency to ensure reclamation of the current mining disturbances.

The Division requires that this surety be provided within ninety (90) days of your receipt of this certified letter. We have enclosed a copy of a Reclamation Contract (FORM MR-RC) which will need to be filled out and returned to this office along with your surety. As you will note, there are sections which must be signed and notarized by the Division and Board. Also enclosed is a list of the forms of surety that are commonly considered acceptable by the Division and Board. Please advise us at your earliest convenience as to your preferred form of surety. We will then send you the appropriate surety form to be used and attached to the Reclamation Contract (FORM MR-RC).

Any supplemental/supportive information that is provided which could substantiate changes or adjustments to the reclamation estimate, must be received with 30-days of your receipt of this letter. We will not consider information received after that date until the required reclamation surety has been received and approved. Notice of a 30-day public comment period will be prepared and published by the Division once we are satisfied with the completeness of the mining and reclamation plan. We would hope to proceed with issuance of a tentative approval within the next 45-60 days.

It is the Division's opinion that Redmond Clay and Salt Company has been given sufficient time and notification to prepare and submit an adequate mining and reclamation plan for your existing operations. The Division has a statutory responsibility to *review* mining and reclamation plan permit applications. It is the operator's responsibility to *develop* and *submit* a complete mining and reclamation plan for review by the Division. Prior to the Division's final approval of a permit application, a reclamation estimate must be calculated (based upon the detailed mining and reclamation plan) and a surety provided by the operator to assure satisfactory reclamation of the lands to be affected by the mining operation.

If Redmond Clay and Salt fails to meet the 90-day time frame established for receipt of the reclamation surety, the Division may prepare a Notice of Agency Action

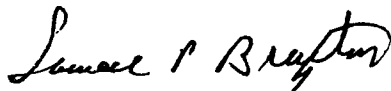
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and/or Board Order, requiring you to appear at a formal hearing before the Board of Oil, Gas and Mining (Board).

At the hearing you would be asked to give just cause why the mining operations should not be ordered suspended and/or reclaimed for failure to acquire a mining permit and post adequate reclamation surety in a timely manner. We would prefer not to have to pursue this course of action.

Thank you for your patience and cooperation in completing this permitting action. Please contact me, Wayne Hedberg, or Anthony Gallegos, of the Minerals permitting staff, if you have questions regarding the content of this letter, the revised reclamation estimate, or need advise in filling out the Reclamation Contract form.

Sincerely,

A handwritten signature in cursive script, reading "Lowell P. Braxton".

Lowell P. Braxton
Associate Director, Mining

AAG/jb
Enclosure
cc: Tom Mitchell, AAG
Minerals staff
M039002.1

RECLAMATION ESTIMATE

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Redmond Clay and Salt Company

last revision 4/17/91

North Mining Property

Sanpete County

M/039/002

Prepared by Utah State Division of Oil, Gas & Mining

Reclamation Details – North Mine Property

- Areas designated as Pre-Law by the Division are to be left as is
- Closure of all mine portals by blasting/backfilling for 15 feet inside
- Regrade portal closure to a 2 horizontal: 1 vertical slope (26 degrees)
- 2 salt mine portals; portal dimensions 20 ft x 25 ft
- Salt Mine highwalls are 50 ft high for entire pit area
- Clay Mine highwalls are 20 ft high for entire pit area
- Pit highwalls to be blasted to 1:1 slope (45 degrees) for entire perimeter
- CLAY PIT floors to be Ripped,Mulched,Disksed,Fertilized, & Seeded(R-M-D-F-S)
- Waste dumps & piles to be regraded to a 3h:1v slope (18 degrees)
- All waste dumps & piles to be M-D-F-S
- Roads without post-mining use to be R-M-D-F-S
- TOTAL area in north mine area to be reclaimed = 10.47 acres

<u>Description</u>	<u>Amount</u>	<u>\$/Unit</u>	<u>Cost-\$</u>
Blasting 2 portals	560 CY	5.55	3,108
Regrading 2 portal closures	280 CY	0.25	70
Blasting salt pit highwalls	715 LF	1.05	751
Rip Salt pit floor	0.81 acre	955	0
M-D-F-S Salt pit floor	0.81 acre	1,480	0
Blasting clay pit highwalls	4,290 LF	0.97	4,161
Rip Clay pit floors (0.40 MPH)	4.07 acre	603	2,454
M-D-F-S Clay pit floors	4.07 acre	1,480	6,024
Regrade waste dump	1.39 acre	802	1,115
M-D-F-S Waste dump	1.39 acre	1,480	2,057
Regrade gravel pile	1.57 acre	802	1,259
M-D-F-S Gravel pile	1.57 acre	1,480	2,324
Rip roads & regrade berm(0.30 mph)	3.44 acre	799	2,749
M-D-F-S Roads	3.44 acre	1,480	5,091
SUBTOTAL			31,162
+ 10% CONTINGENCY			3,116
SUBTOTAL			34,278
+ 5 yr ESCALATION(1.45%)			2,558
NORTH MINING PROPERTY SUBTOTAL IN 1996-\$			\$36,836

RECLAMATION ESTIMATE
Redmond Clay and Salt Company
South Mining Property
M/039/002

PAGE 2 of 6
4/17/91

Sanpete County

Prepared by Utah State Division of Oil, Gas & Mining

Reclamation Details – South Mine Property

- Closure of all mine portals by blasting/backfilling for 15 feet inside
- Regrade portal closure to a 2 horizontal: 1 vertical slope (26 degrees)
- 4 salt mine portals; portal dimensions 20 ft x 50 ft
- Salt Mine highwalls are 60 ft high for entire pit area
- Pit highwalls to be blasted to 1:1 slope for entire perimeter
- SALT PIT floors WILL NOT receive revegetation treatments
- Waste dump & new earth removal area regraded to a 3h:1v slope (18 degrees)
- Waste dump & new earth removal areas to be M-D-F-S
- Half of Yard area (includes facilities area) to be R-M-D-S-F
- ASSUMED: Metal scrap to be buried on mine site and area R-M-D-S-F
- Roads without post-mining use R-M-D-S-F; TOTAL reclaim. = 13.52 acre

<u>Description</u>	<u>Amount</u>	<u>\$/Unit</u>	<u>Cost-\$</u>
Blasting 4 portals	1,112 CY	5.55	6,172
Regrading 4 portal closures	556 CY	0.25	139
Blasting salt pit highwalls	1,925 LF	1.51	2,907
Rip Salt pit floor	2.06 acre	955	0
M-D-F-S Salt pit floor	2.06 acre	1,480	0
Regrade Waste dump	1.08 acre	802	866
M-D-F-S Waste dump	1.08 acre	1,480	1,598
Regrade Earth removal area	2.51 acre	802	2,013
M-D-F-S Earth removal area	2.51 acre	1,480	3,715
Rip 1/2 Yard area (0.30 mph)	2.50 acre	799	1,998
M-D-S-F 1/2 Yard area	2.50 acre	1,480	3,700
Bury metal scrap	0.77 acre	1,210	932
Rip Metal Scrap area (0.30 mph)	0.77 acre	799	615
M-D-S-F Metal Scrap area	0.77 acre	1480	1,140
Rip roads & regrade berm(0.30 mph)	6.22 acre	799	4,970
M-D-F-S Roads	6.22 acre	1,480	9,206
SUBTOTAL			39,969
+ 10% CONTINGENCY			3,997
SUBTOTAL			43,966
+ 5 yr ESCALATION(1.45%)			3,281
SOUTH MINING PROPERTY SUBTOTAL-A			IN 1996-\$
			\$47,247

RECLAMATION ESTIMATE
Redmond Clay and Salt Company
South Mining Property
M/039/002

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4/17/91
Sanpete County

Prepared by Utah State Division of Oil, Gas & Mining

Reclamation Details – South Mine Property --CONTINUED--

- Pond area to be backfilled/regraded and M-D-S-F
- Facilities with no postmine use demolished & buried on site; no salvage value
- ASSUMED: The following dimensions for each facility listed below
- Shed 45'x20'x18'; Shop 70'x30'x20'; Primary Crusher 60'x30'x20';
- Secondary Crusher 60'x30'x20'; Mill 150'x80'x25'; Bulk Storage 150'x140'x25';
- Scales 75'x20'x15'; Old Compressor House 30'x30'x12'; Old Pump
- House 30'x30'x12'; Compressor House 30'x30'x12'; Tank 25' diameter;
- ASSUMED: Crushers have reinforced concrete; bldgs have concrete floors

Description	Amount		\$/Unit	Cost-\$
Backfill/Regrade Pond	709	CY	0.42	298
M-D-S-F Pond area	0.44	acre	1480	651
Demolish Shed **POST MINING USE **	16,200	CF	0.20	0
Demolish Shop**POST MINING USE**	42,000	CF	0.20	0
Shop Concrete Floor	0	SY	11.75	0
Demo./Remodel Primary Crusher[1/4]	9,000	CF	0.20	1,800
Crusher Concrete--buried onsite--	40	CY	245	9,800
Demo./Remodel Secondary Crusher[1/4]	9,000	CF	0.20	1,800
Crusher Concrete--buried onsite--	40	CY	245	9,800
Demolish/remodel Mill [1/5 of area]	60,000	CF	0.20	12,000
Demo. Mill Concrete Floor	1333	SY	11.75	0
Demo. Bulk Str. **POST MINING USE**	525,000	CF	0.20	0
Demo. Bulk Storage Floor**POST USE**	2333	SY	11.75	0
Demolish Scales	22,500	CF	0.20	4,500
Demo. Old Pump House	10,800	CF	0.20	2,160
Demo. Old Compressor House	10,800	CF	0.20	2,160
Demo. Compressor House	10,800	CF	0.20	2,160
Demolish Tank	1	ea	500	500
SUBTOTAL				47,629
+ 10% CONTINGENCY				4,763
SUBTOTAL				52,392
+ 5 yr ESCALATION(1.45%)				3,910
SOUTH MINING PROPERTY SUBTOTAL-B			IN 1996-\$	\$56,302

RECLAMATION ESTIMATE	PAGE 4 of 6
Redmond Clay and Salt Company	4/17/91
Clay Mining Property	Sanpete County
M/039/002	
Prepared by Utah State Division of Oil, Gas & Mining	

Reclamation Details – Clay Mine Property

- ASSUMED: Clay Mine highwalls are 20 ft high for entire pit area
- Pit highwalls to be blasted to 1:1 slope for entire perimeter
- Four Pits: (1) 1.17 acre P=1,040'; (2) 2.61 acre P=1,250';
- (3) 1.18 acre P=1,040'; (4) 2.44 acre P=2,080';
- Pit floors to be R-M-D-F-S
- ASSUMED: Clay Pads have an earthen base
- Two Clay Pads: (1) 2.36 acre; (2) 11.16 acre; to be R-M-D-S-F
- Brine Pond to be backfilled/regraded -NO REVEGETATION TREATMENTS
- ASSUMED: Clay Mill to have a post mining use
- ASSUMED: Clay Mill dimensions are 250'x100'x20', with a concrete floor
- Roads without post-mining use to be R-M-D-S-F; TOTAL reclaim. = 29.85 acre

<u>Description</u>	<u>Amount</u>		<u>\$/Unit</u>	<u>Cost-\$</u>
Blasting clay pit highwalls	5,410 LF		0.97	5,248
Rip Clay pit floors(0.40 mph)	7.40 acre		603	4,462
M-D-F-S Clay pit floors	7.40 acre		1,480	10,952
Rip Clay Pads	13.52 acre		955	12,912
M-D-S-F Clay Pads	13.52 acre		1480	20,010
Backfill/Regrade Brine Pond	0.69 acre		1210	835
M-D-S-F Brine Pond	0.69 acre		1480	1,021
Demo. Clay Mill**POST MINING USE**	500,000 CF		0.20	0
Demo. Clay Mill Floor**POST USE**	2,777 SY		9.20	0
Rip roads & regrade berm(0.30 mph)	8.24 acre		799	6,584
M-D-F-S Roads	8.24 acre		1,480	12,195
SUBTOTAL				74,218
+ 10% CONTINGENCY				7,422
SUBTOTAL				81,640
+ 5 yr ESCALATION(1.45%)				6,093
CLAY MINING PROPERTY SUBTOTAL IN 1996-\$				\$87,733

RECLAMATION ESTIMATE		PAGE 5 of 6
Redmond Clay and Salt Company		4/17/91
Salt & Clay Mining Properties		Sanpete County
M/039/002		
Prepared by Utah State Division of Oil, Gas & Mining		
<p>*** REFERENCES USED IN CALCULATING THIS ESTIMATE:</p> <p>-Means Site Work Cost Data 1990</p> <p>-Caterpillar Performance Handbook, Edition 18</p> <p>-Rental Rate Blue Book, 1989 & 1990 sources</p> <p>Blasting [022-234-0100] <= Means Reference Number</p> <p>Mulch [029-516-0350]</p> <p>Disking [029-204-6050]</p> <p>Seeding [029-308-1600]</p> <p>Fertilizing [029-720-0130]</p> <p>Building Demolition & Disposal (Burial) [020-604-0500] & [020-604-0100]</p> <p>Concrete Demolition, 6" thick, mesh reinforced [020-554-1900]</p> <p>Concrete Demolition, 6" thick, rod reinforced [020-554-2000]</p> <p>Concrete Demolition, 7-24" thick, reinforced [020-554-2200]</p> <p>***The following items were calculated by the Division using the</p> <p>*** Cat Handbook, Blue Book and SME Mining Engineering Handbook, 1973:</p> <p>Regrading: Portal Closures, Dumps, Piles, Ponds</p> <p>Ripping: Pit Floors, Roads, Pads; Blasting Pit Highwalls</p> <p>Burying Scrap Metal</p>		
<u>SUMMARY OF RECLAMATION COSTS</u>		
NORTH MINING PROPERTY SUBTOTAL		\$36,836
SOUTH MINING PROPERTY SUBTOTAL-A		\$47,247
SOUTH MINING PROPERTY SUBTOTAL-B		\$56,302
CLAY MINING PROPERTY SUBTOTAL		\$87,733
TOTAL OF RECLAMATION ESTIMATE		\$228,118
ROUNDED TOTAL OF RECLAMATION ESTIMATE IN 1996-\$		\$228,100

RECLAMATION ESTIMATE		PAGE 6 of 6
Redmond Clay and Salt Company		4/17/91
Salt & Clay Mining Properties		Sanpete County
M/039/002		
Prepared by Utah State Division of Oil, Gas & Mining		
**NOTE: All areas used in this estimate were found by digitizing the scaled maps provided by the operator The '*' character indicates an area which will not be reclaimed		
<u>NORTH MINING PROPERTY</u>		<u>ACREAGE</u>
Old Uncovering & Waste Pile (PRE-LAW 3.98 acre)		0.00
Old Poulson Mine (PRE-LAW 0.80 acre)		0.00
Salt Mine – Pit Floor	*	0.81
Clay Pits		4.07
Waste Dump		1.39
Overburden Gravel Pile		1.57
All roads except county road		2.80
Roads outside block but mining associated		0.64
SUBTOTAL		11.28
<u>SOUTH MINING PROPERTY</u>		
Old Earth Removal Fill & Dump (PRE-LAW 10.88 acre)		0.00
New Earth Removal		2.51
New Waste Dump		1.08
Estimated Yard Area (2.70 acres unreclaimed)	*	5.20
Metal Scrap Pile		0.77
Mill, Facilities & Salt Pile	*	1.20
Roads within block, excluding county road and farm road		3.82
Dry Pond		0.44
Salt Mine – Pit Floor	*	2.06
Roads outside block but mining associated		2.40
SUBTOTAL		19.48
<u>CLAY MINING PROPERTY</u>		
Clay Pits		7.40
Clay Pads		13.52
Brine Pond		0.69
Clay Mill	*	0.57
All roads except county road & farm access		8.24
SUBTOTAL		30.42
TOTAL DISTURBED ACREAGE		61.18
TOTAL ACREAGE TO BE RECLAIMED		53.84